



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/807,970

03/24/2004

Frank Odenthal

10541-1994

4461

57444

7590

04/26/2006

AUTOMOTIVE COMPONENTS HOLDINGS, LLC
c/o MACMILLAN SOBANSKI & TODD
One Maritime Plaza, Fourth Floor
720 Water Street
Toledo, OH 43604-1853

EXAMINER

KRAUSE, JUSTIN MITCHELL

ART UNIT

PAPER NUMBER

3682

DATE MAILED: 04/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/807,970	Applicant(s) ODENTHAL ET AL.	
	Examiner Justin Krause	Art Unit 3682	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 9, 10 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/24/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Invention I and Species I in the reply filed on April 13, 2006 is acknowledged. The traversal is on the ground(s) that the examiner has not shown or suggested an alternative method that can make the product as claimed. This is not found persuasive because the examiner indicated in the restriction requirement that the device could be made by a process providing for installation of a drive portion (paragraph 2).

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 9, 10 and 12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention (Claim 12) and Species (Claims 9 and 10), there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on April 13, 2006.

Specification

3. The disclosure is objected to because of the following informalities: numerous spelling/typographical errors. Applicant is advised to proofread the specification in full and make the necessary corrections.

In paragraph 15, the abbreviation 'EPAS' should be written in full before using any acronyms.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-8 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Sickert et al (US 2003/00115980).

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Sickert discloses a toothed rack gear assembly comprising:

-an adjusting nut (25) having external threads;

-a housing (101) having portions defining an opening with internal threads, the opening adapted to the adjusting nut so as to receive the adjusting nut in an assembled state of the rack steering gear assembly, at least one recess (17) being provided in the housing, the recess being in direct proximity of the opening;

-a retainer having a ring shaped body and further having at least one finger protruding from the ring shaped body, the finger corresponding to the recess and being located and positioned in the recess, the at least one recess and the at least one finger corresponding in number;

-the retainer further including a back surface and the adjusting nut further including a front surface, in the assembled state the front surface of the adjusting nut being in contact with the back surface of the retainer, the adjusting nut and the retainer being fixedly and securedly connected to each other between the back surface and the front surface in the assembled state of the assembly.

In Sickert, the adjusting nut is threaded into the housing, then a melting device (30) softens the material of the adjusting nut. The softened material flows into radial recesses (17) in the housing wall, also containing locking projections (31) which prevent turning of the adjusting nut (paragraphs 0042-0043). The recesses may be of any geometric shape and number (Paragraph 0037) depending on the desired breakaway torque.

This process creates the retainer having a ring shaped body and at least one finger corresponding to the recess and fixedly secures the back surface of the retainer to the front surface of the adjusting nut, since the melting device operates from the exterior surface (3) of the adjusting nut. The process molds the retaining ring on the device during assembly.

Regarding claims 2 and 3, the adjusting nut has a drive portion (14) which may have an inner or outer hexagonal profile (paragraph 0030) and is positioned within an opening defined by the ring shaped body of the retainer.

Regarding claim 4, the recess is open in a direction of the internal threads.

Regarding claim 5, the at least one finger defines an inner surface corresponding with the internal threads, projections being formed on the inner surface of the at least one finger.

By melting the retaining ring into the recess of any geometric shape, the one finger would take any shape the retaining ring was made in, including one with an inner surface corresponding with the internal threads, projections being formed on the inner surface of the at least one finger.

Regarding claim 6, the at least one finger is connected with the ring shaped body in a way that when applying a torque above a threshold value to the ring shaped body the at least one finger in the at least one recesses break off. (Paragraph 0046)

Regarding claim 7, in an axial direction the at least one recess extends only over a sub-range of an axial length of the internal threads so that, starting from a front surface of the housing, there is an unimpaired part of the internal thread beyond the at least one recess, and wherein an axial length of the external thread of the adjusting nut is larger than an axial length of the at least one recess.

The recess may be of any suitable shape, including one where the recess extends over a sub-range of an axial length of the internal threads.

Regarding claims 8 and 11, the retainer and adjusting nut are fixedly connected by a rib that protrudes from one of the back surface or the front surface and which during an ultrasonic welding melts and effects a rigid connection.

The recesses may be plural in number and of any geometric shape, facilitating a rib, and ultrasonic welding is a melting device (paragraph 0044).

Conclusion


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Krause whose telephone number is 571-272-3012. The examiner can normally be reached on Monday - Friday, 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMK
4/23/06


RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER